



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,047	06/15/2006	Seiji Kashioka	N/A	8851

7590 10/04/2007
Seiji Kashioka
19743 Vista Hermosa Drive
Walnut, CA 91789

EXAMINER

WARREN, DAVID S

ART UNIT	PAPER NUMBER
----------	--------------

2837

MAIL DATE	DELIVERY MODE
-----------	---------------

10/04/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/583,047

Applicant(s)

KASHIOKA, SEIJI

Examiner

David S. Warren

Art Unit

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1 – 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The word “takt” is not an English word. It is recommended that the Applicant use an alternative. Also in claim 1, “autonomously” should probably be automatically and “forth” should probably be fourth. Regarding claim 2, it cannot be understood as to what is meant by a “note or rest displayed at a position inside a partition apart with enough distance in both forward and backward direction from the partition to be renewed.” It is not understood as to why the renewal depends on any “distance” in the display. Also, how can a note be displayed inside a partition but yet a distance from the partition? For the sake of the following rejection, the Examiner is interpreting this to mean that a partition will be renewed while a note or rest is not close to a forward end – in a manner similar to a human page turner who turns pages slightly before the musician reaches the last few notes. Claim 10 is interpreted to mean that the upper half of a display is renewed while the music position is in the lower half. This claim is difficult to interpret, if the Examiner’s interpretation is not what Applicant intended, correction is required (and clarification is requested). Also

in claim 10, the reference to fig. 5 should be removed. It is requested that the Applicant write all the claims in a manner that can be easily understood using correct idiomatic English.

3. Furthermore, regarding claim 1, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 7 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Sitrick (7,098,392). Regarding claim 1, Sitrick discloses a system for displaying a music score, having a first memory for storing a score (col. 8, last paragraph), storing a tempo in Sitrick's mode (as an automatic page turner) would inherently store a tempo, a first function of automatic advance ("turning pages" is deemed to be an automatic advance of a score), a second function for setting up partition of a display and a third function

Art Unit: 2837

which renews the display at a partition (see Sidick's discussion of "slices" - fig. 23; col. 32, lines 35 – 45; this feature could also be considered synonymous with Sitrick's pagination feature where page breaks are in accordance with bars, etc. – see last paragraph of col. 31), and a fourth function, that corrects difference (Sitrick's adjusting the display to the performer is synonymous with "corrects difference between internal music and ... performance." Regarding claim 7, Sitrick discloses the use of a master-slave arrangement (figs. 1, 2, and 7c) as two performer systems. Sitrick states:

In one embodiment, two Performer subsystems are operable alternatively as one of a single appliance as a linked set a linked mode and as two independent appliances a stand-alone mode, wherein in the linked mode each of the two Performer subsystems operate cooperatively with each other as a linked set to provide a two page display on the video presentation, and wherein in the stand alone mode each of the two Performer subsystems operates independently and mutually exclusive of the other to provide two independent and mutually exclusive single page displays on the video presentation.

Regarding claim 8, Sitrick discloses the use of a touch screen display that can be used to position the current location to any point in the score, this is interpreted as "both directions." Sitrick states:

FIG. 17 illustrates the manual mode (1250), which provides for user manual selection of functions (1252), such as hitting a button or a touch screen to cause the turning of the page of the display, or to go back a page or to scroll forwards or backwards, or to increase the font size or magnification of the music presentation.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2 – 6, 9, and 10 rejected under 35 U.S.C. 103(a) as being unpatentable over Sitrick (discussed supra) in view of Grubb et al. (5,913,259). Regarding claim 2, as best as can be understood (see §112 rejection supra – see Examiner's interpretation), Sitrick does not teach the use of providing a note with enough distance in both forward and backward direction from the partition to be renewed. Grubb discloses that a window (i.e., a partition) is moved slightly to the left or right to make the window move through the score and "follow the performer" (col. 9, lines 30 – 40). Regarding claim 3, Sitrick does not disclose the use of multi-level timing inputs regarding reliability and correction. Grubb discloses three levels of input (performer's source position, current location, and estimated distance traversed, which is based on tempo – col. 5. lines 39 - 56) and the use of finding a "most probable" location (this would appear to be synonymous with Applicant's "reliability" feature). Regarding claim 4, while neither Sitrick nor Grubb specifically state using Applicant's ratio calculations. Grubb specifically states using calculations (i.e., models) from a previous correction (previous observation) and current locations to adjust tempo (it appears that Applicant's "durations" have to do with tempo clock durations, therefore, the Examiner is equating

Art Unit: 2837

"durations" to tempo). Therefore, Applicant's claim 4 and Grubb's system of adjusting tempo and location, appear to be functionally equivalent. Regarding claims 5 and 6, Official Notice is hereby taken that storage of data is well-known. Furthermore, Grubb uses estimated tempos in modeling a current position, presumable, those tempos would somehow need to be stored to become available for use in any modeling. Regarding claim 9, all limitations have been discussed supra. Regarding claim 10, Sitrick discloses the use of slices (figs. 23 – 25) that are used to renew the display. The Examiner acknowledges that Sitrick is silent as to "lower enough" [sic] and "upper enough" [sic] note displays, but Sitrick's slice method is used to efficiently perform the function of renewing the display so as to provide an easily readable score. The Examiner maintains that this is functionally equivalent to providing "enough time period...of displaying whole page." It would have been obvious to one of ordinary skill in the art to combine the teachings of Sitrick and Grubb to obtain a score display system having the partitioning system (i.e., windowing system) to efficiently track a musician's performance. The motivation for making this combination would be to simulate the turning of pages by a human "page-turner," specifically, to turn a page before the musician has reached the last notes (or measures). This gives a musician the ability to smoothly transition from page to page.


Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The documents listed on PTO form 892 all have related material to Applicant's invention. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David S. Warren whose telephone number is 571-272-2076. The examiner can normally be reached on M-F, 9:30 A.M. to 6:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on 571-272-2837. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Dsw



DAVID S. WARREN